

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A sandwich assay method for quantification ~~deteeting a presenece~~ of a target molecule in a sample comprising a complex biological fluid selected from serum, plasma, saliva, whole blood, plasma from plasmapheresis, cerebrospinal fluid, amniotic fluid, urine, semen, cord blood, supernatants from cell culture, cell culture media, exsudate and aspirate, which assay comprises:

providing a first affinity ligand with affinity for the target molecule, which affinity ligand is capable of being immobilized to a solid support;

applying a sample comprising a complex biological fluid in such a way that binding of a target molecule, if present in the sample comprising a complex biological fluid, to the first affinity ligand is enabled;

applying a second affinity ligand with affinity for the target molecule, the application enabling binding of the second affinity ligand to the target molecule;

removing second affinity ligand not bound to target molecule; ~~and~~

detecting a presence of the second affinity ligand; and comparing the result obtained for the presence with results obtained for standards of the target molecule to determine the amount of the target molecule in the sample; ~~such presence~~

~~being an indicator of the presence of a target molecule in the sample~~

the first affinity ligand being immobilized to the solid support at any stage before said detection,

wherein at least one of the first and second affinity ligands is an engineered protein selected from a library constructed by combinatorial means through randomization of a given number of amino acids in a scaffold protein consisting of a naturally occurring protein or domain(s) thereof as a scaffold ~~constructed from a scaffold domain selected from domains of bacterial receptors, fibronectins, protease inhibitors, retinol binding proteins, bilin binding proteins, amylase inhibitors, CTLA-4, cytochromes, or cellulose binding proteins.~~

2. (Previously Presented) The sandwich assay method according to claim 1, in which the first affinity ligand is provided immobilized to the solid support.

3. (Previously Presented) The sandwich assay method according to claim 1, in which the first affinity ligand is immobilized to the solid support during performance of the method.

4. (Previously Presented) The sandwich assay method according to claim 2, in which the solid support is selected from microtiter plates, compact discs comprising microfluidic channels, protein array chips, membranes, microparticles, pin structures, stick structures, sensor surfaces, or cell surfaces.

5. (Previously Presented) The sandwich assay method according to claim 4, in which the solid support is a microtiter plate.

6. (Previously Presented) The sandwich assay method according to claim 1, which further comprises removing target molecules not bound to the first affinity ligand.

7. (Previously Presented) The sandwich assay method according to claim 1, in which the second affinity ligand is an affinity ligand other than an antibody.

8. (Previously Presented) The sandwich assay method according claim 1, in which the first affinity ligand is an affinity ligand other than an antibody.

9. (Previously Presented) The sandwich assay method according to claim 1, in which both the first and the second affinity ligand is an affinity ligand other than an antibody.

Claims 10. - 14. (Canceled)

15. (Previously Presented) The sandwich assay method according to claim 1, in which the scaffold is selected from bacterial receptor domains.

16. (Previously Presented) The sandwich assay method according to claim 15, in which the scaffold is selected from immunoglobulin binding domains of staphylococcal protein A.

17. (Previously Presented) The sandwich assay method according to claim 16, in which the scaffold is a B domain of staphylococcal protein A.

18. (Currently Amended) The sandwich assay method according to claim 16, in which the scaffold is a Z domain derived from ~~the~~ a B domain of staphylococcal protein A.

19. (Previously Presented) The sandwich assay method according to claim 15, in which the scaffold is selected from immunoglobulin binding domains of *Peptostreptococcus magnus* protein L.

20. (Previously Presented) The sandwich assay method according to claim 15, in which the scaffold is selected from immunoglobulin binding domains of streptococcal protein G.

21. (Previously Presented) The sandwich assay method according to claim 15, in which the scaffold is selected from albumin binding domains of streptococcal protein G.

22. (Previously Presented) The sandwich assay method according to claim 1, in which the engineered protein is selected from a library of variants of the selected scaffold.

23. (Previously Presented) The sandwich assay method according to claim 22, in which the library is a combinatorial library.

24. (Previously Presented) The sandwich assay method according to claim 22, in which the library is constructed with phage display technology.

25. (Previously Presented) The sandwich assay method according to claim 1, in which the engineered protein is derived from a library of linear peptides.

26. (Previously Presented) The sandwich assay method according to claim 1, in which the engineered protein is derived from a library of cyclic peptides.

Claims 27. - 32. (Canceled).

33. (Previously Presented) The sandwich assay method according to claim 1, in which the sample is a human sample.

34. (Previously Presented) The sandwich assay method according to claim 33, in which the sample is a human serum sample.

Claims 35.-40. (Canceled)

41. (Previously Presented) The sandwich assay method according to claim 3, in which the solid support is selected from microtiter plates, compact discs comprising microfluidic channels, protein array chips, membranes, microparticles, pin structures, stick structures, sensor surfaces, or cell surfaces.

42. (Previously Presented) The sandwich assay method according to claim 41, in which the solid support is a microtiter plate.

43. (New) The sandwich assay method of claim 1, wherein the second affinity ligand is biotinylated.

44. (New) The sandwich assay method of claim 43, wherein the detection is made by measuring absorbance.